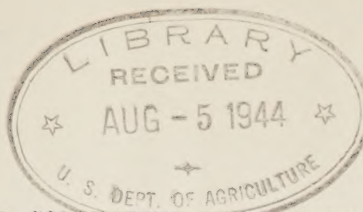


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APPARATUS USED FOR COLLECTING INSECTS IN THE FIELD

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This apparatus is of primary value where relatively robust insects, such as beetles, are to be collected from place to place in the field. It is also useful for transferring aphids from a sweeping net into cages for transportation to the laboratory.

The apparatus consists of three parts: Wire cage, detachable funnel, and detachable base. See figure 1. When assembled, it is 2 inches in diameter and from 5 to 8 inches high, depending on the height of the wire cage.

The cage is made from a 2-inch by $\frac{3}{4}$ -inch tin pill box and a cylinder of 16-mesh screen wire of any desirable height. The upper quarter inch of the bottom part of the pill box is cut off to form the upper opening of the cage, and the remaining part of the pill box forms the bottom of the cage. The cover of the pill box then fits as a cover to the top of the cage. The wire cylinder is soldered to the inside of both pieces of the pill box, and the place where the wire cylinder comes together is run down with solder in order to strengthen the cage.

The funnel is made of 24-gage galvanized iron or tinned iron. It has a 3-inch opening at the top, a $1\frac{1}{2}$ -inch opening at the bottom, and a depth of $2\frac{1}{2}$ inches. It is soldered to an opening in the center of the pill-box cover. The opening of this cover is closed with a swinging flap hinged to the cover by means of a steel nail with an elbow extending to the outside. The flap is kept in a closed position by means of a rubber band attached to the elbow and to a hook soldered at the top of the funnel. It may be easily opened by pressure of the thumb and readily snaps back into place.

The base is $\frac{5}{8}$ inch tall by $2\frac{1}{4}$ inches in diameter and is made of the same material as the funnel. Hooks are soldered on two sides of the base and the funnel, and when the funnel and base are in position, they are held tight over the cage by elastic bands. The funnel assembly and base should have a loose fit on the cage.

As shown in the figure, cages of various heights may be used with this funnel-base arrangement, and if the funnel is being used only as a means of transferring insects into the cage, the base does not have to be used.

Figure 1.--Apparatus for collecting insects in the field. A, funnel;
B. base; C, assembled collecting apparatus; D and E, two other sizes
of cages.

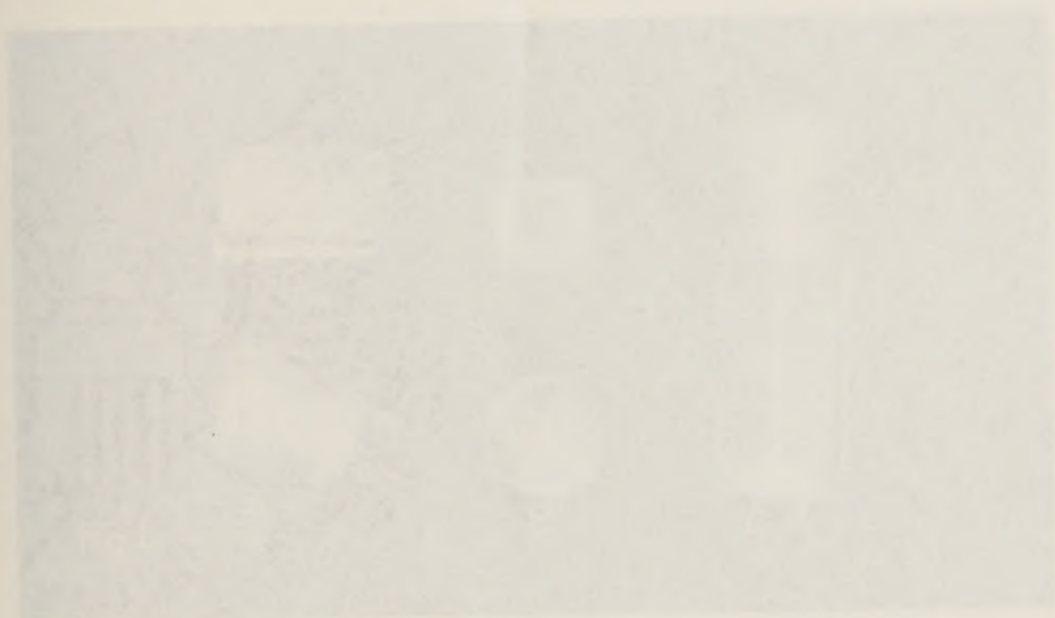


Fig.1

